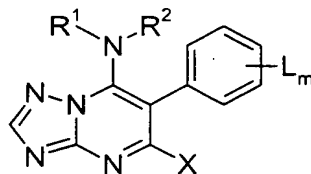


We claim:

1. 7-(Alkynylamino)triazolopyrimidines of the formula I

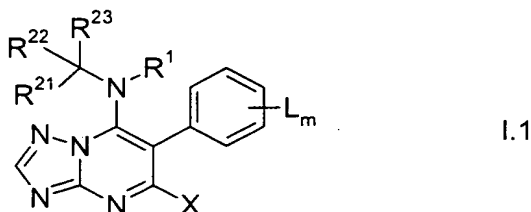


5 in which the substituents have the following meanings:

- L is, independently of one another, halogen, C₁-C₆-alkyl, C₁-C₆-haloalkyl, C₁-C₆-alkoxy, amino, NHR, NR₂, cyano, S(O)_nA¹ or C(O)A²;
- 10 R is C₁-C₈-alkyl or C₁-C₈-alkylcarbonyl;
- A¹ is hydrogen, hydroxyl, C₁-C₈-alkyl, C₁-C₈-alkylamino or di(C₁-C₈-alkyl)amino;
- 15 n is 0, 1 or 2;
- A² is C₂-C₈-alkenyl, C₁-C₈-alkoxy, C₁-C₆-haloalkoxy or one of the groups mentioned in A¹;
- 20 m is 1, 2, 3, 4 or 5, at least one L group being in the ortho position with respect to the bond with the triazolopyrimidine skeleton;
- X is halogen, cyano, C₁-C₄-alkyl, C₁-C₄-haloalkyl or C₁-C₄-alkoxy;
- 25 R¹ is hydrogen or C₁-C₄-alkyl;
- R² is C₃-C₁₀-alkynyl, which can be unsubstituted or partially or completely halogenated or can carry one to three R^a groups:
- 30 R^a is halogen, cyano, nitro, hydroxyl, C₁-C₆-alkylcarbonyl, C₃-C₆-cycloalkyl, C₁-C₆-alkoxy, C₁-C₆-haloalkoxy, C₁-C₆-alkoxycarbonyl, C₁-C₆-alkylthio, C₁-C₆-alkylamino, di(C₁-C₆-alkyl)amino, C₂-C₆-alkenyl, C₂-C₆-alkenyloxy, C₃-C₆-alkynyloxy or C₃-C₆-cycloalkyl,
- 35 these aliphatic or alicyclic groups for their part being able to be partially or completely halogenated or to carry one to three R^b groups;

R^b is halogen, cyano, nitro, hydroxyl, mercapto, amino, carboxyl, aminocarbonyl, aminothiocarbonyl, alkyl, haloalkyl, alkenyl, alkenyloxy, alkynyloxy, alkoxy, haloalkoxy, alkylthio, alkylamino, dialkylamino, formyl, alkylcarbonyl, alkylsulfonyl, alkylsulfoxyl, alkoxy carbonyl, alkylcarbonyloxy, alkylaminocarbonyl, dialkylaminocarbonyl, alkylaminothiocarbonyl or dialkylaminothiocarbonyl, the alkyl groups in these radicals comprising 1 to 6 carbon atoms and the abovementioned alkenyl or alkynyl groups in these radicals comprising 2 to 8 carbon atoms.

2. Compounds of formula I.1



in which

R^{21} is methyl or halomethyl;

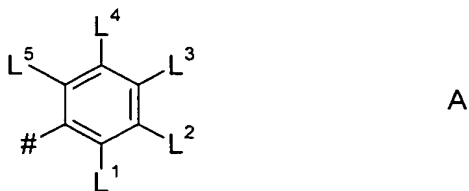
R^{22} is hydrogen, methyl or halomethyl;

R^{23} is C_2 - C_8 -alkynyl, which can be unsubstituted or partially or completely halogenated and/or can carry one to three R^a groups;

and the other variables are defined as claimed in claim 1.

3. Compounds of formula I or I.1 as claimed in claim 1 or 2, wherein X represents chlorine or methyl, in particular chlorine.

4. Compounds of formula I or I.1 as claimed in any of claims 1 to 3, wherein the phenyl group substituted by L_m is the group A



in which # is the point of linkage with the triazolopyrimidine skeleton and

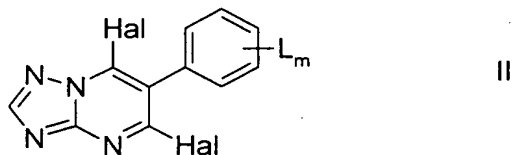
L^1 represents fluorine, chlorine, CH_3 or CF_3 ;

L^2 and L^4 represent, independently of one another, hydrogen or fluorine;

L^3 represents hydrogen, fluorine, chlorine, CH_3 , OCH_3 , amino, NHR or NR_2 ;
and

L^5 represents hydrogen, fluorine or CH_3 .

5. Compounds of formula I as claimed in any of claims 1 to 3, wherein the phenyl group substituted by L_m is one of the following substituent combinations: 2-fluoro-6-chloro, 2,6-difluoro, 2,6-dichloro, 2-fluoro-6-methyl, 2,4,6-trifluoro, 2,6-difluoro-4-methoxy, pentafluoro, 2-methyl-4-fluoro, 2-trifluoromethyl, 2-methoxy-6-fluoro, 2-chloro, 2-fluoro, 2,4-difluoro, 2-fluoro-4-chloro, 2-chloro-4-fluoro, 2,3-difluoro, 2,5-difluoro, 2,3,4-trifluoro, 2-methyl, 2,4-dimethyl, 2-methyl-4-chloro, 2-fluoro-4-methyl, 2,6-dimethyl, 2,4,6-trimethyl, 2,6-difluoro-4-methyl, 2-trifluoromethyl-4-fluoro, 2-trifluoromethyl-5-fluoro or 2-trifluoromethyl-5-chloro.
6. A process for the preparation of the compound of the formula I as claimed in any one of claims 1 to 5 by reaction of dihalotriazolopyrimidines of the formula II



in which the variables have the meanings given for formula I and Hal is a halogen atom, in particular chlorine, with amines of the formula III



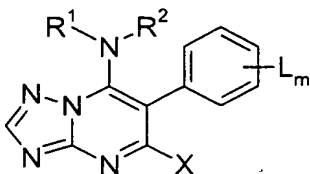
7. A preparation suitable for the control of harmful fungi, comprising a solid or liquid carrier and a compound of the formula I as claimed in claim 1.
8. A process for the control of harmful phytopathogenic fungi, which comprises treating the fungi or the materials, plants, ground or seeds to be protected from fungal attack with an effective amount of a compound of the formula I as claimed in claim 1.

7-(Alkynylamino)triazolopyrimidines, their preparation and their use in the control of harmful fungi, and preparations comprising them

Abstract

5

7-(Alkynylamino)triazolopyrimidines of the formula I



I

in which the substituents have the following meanings:

10

L is halogen, alkyl, haloalkyl, alkoxy, amino, NHR, NR₂, cyano, S(O)_nA¹ or C(O)A²;

R is alkyl or alkylcarbonyl;

A¹ is hydrogen, hydroxyl, alkyl, alkylamino or dialkylamino;

n is 0, 1 or 2;

15

A² is alkenyl, alkoxy, haloalkoxy or one of the groups mentioned in A¹;

m is 1, 2, 3, 4 or 5, at least one L group being in the ortho position with respect to the bond with the triazolopyrimidine skeleton;

20

X is halogen, cyano, alkyl, haloalkyl or alkoxy;

R¹ is hydrogen or alkyl;

R² is alkynyl, which can be unsubstituted or substituted according to the description;

25

processes for the preparation of these compounds, preparations comprising them and their use in the control of harmful phytopathogenic fungi.